

## Case 3052

***Sphaerius* Waltl, 1838 and SPHAERIUSIDAE Erichson, 1845 (Insecta, Coleoptera): proposed conservation by the partial revocation of Opinion 1331**

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**Abstract.** The purpose of this application is to conserve the beetle family-group name SPHAERIUSIDAE Erichson, 1845 and the name of its type genus *Sphaerius* Waltl, 1838. The nominal genus *Sphaerius* was unnecessarily suppressed in Opinion 1331 (1985) despite the fact that it was never (and is still not) a homonym. The Commission is asked to rescind certain parts of Opinion 1331 and to correct errors of fact relating to a number of names placed on Official Lists.

**Keywords.** Nomenclature; taxonomy; Coleoptera; SPHAERIUSIDAE; *Sphaerius*; *Sphaerius acaroides*.

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1. An application from Dr A.H. Clarke for the removal of the homonymy of the family-group name SPHAERIIDAE in Mollusca and Insecta was published in 1970 as Case 1892 (BZN 26: 235–237). Various comments and alternative proposals were received and published in the *Bulletin*, and it was not until 1985 that the rulings of the Commission were published as Direction 117 (BZN 42: 43–45) and Opinion 1331 (BZN 42: 230–232). These rulings were:

- (1) Under the plenary powers the generic name *Sphaerius* Waltl, 1838 and all subsequent uses of that name were suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) The generic name *Microsporus* Kolenati, 1846 (gender: masculine), type species by monotypy *Microsporus obsidianus* Kolenati, 1846, was placed on the Official List of Generic Names in Zoology;
- (3) An earlier entry on the Official List of Generic Names in Zoology was corrected to read: *Sphaerium* Scopoli, 1777 (gender: neuter), type species by monotypy [not by subsequent designation by J.E. Gray, 1847] *Tellina cornea* Linnaeus, 1758;
- (4) The specific name *obsidianus* Kolenati, 1846, as published in the binomen *Microsporus obsidianus* (specific name of the type species of *Microsporus* Kolenati, 1846) was placed on the Official List of Specific Names in Zoology;
- (5) The following family-group names were placed on the Official List of Family-Group Names in Zoology:
  - (a) SPHAERIIDAE Jeffrey, 1862 (1820) (type genus *Sphaerium* Scopoli, 1777);
  - (b) MICROSPORIDAE Reichardt, 1976 (type genus *Microsporus* Waltl, 1838);

- (6) The following generic names were placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
- (a) *Sphaerius* Waltl, 1838, as suppressed under the plenary powers;
  - (b) *Cyclas* Lamarck, [1798] (a junior objective synonym of *Sphaerium* Scopoli, 1777);
- (7) The following family-group names were placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
- (a) CYCLADIDAE (as 'Cycladia') Rafinesque, 1820 (invalid because the name of its type genus is a junior objective synonym rejected before 1961);
  - (b) SPHAERIIDAE Erichson, 1845 (invalid because the name of its type genus was suppressed under the plenary powers).
2. Although, following Opinion 1331, *Microsporus* and MICROSPORIDAE have often been used, *Sphaerius* and its derived family name have been retained by some workers (e.g. Lafer, 1989; Yang, 1994; Telnov et al., 1997), while White & Brigham (1996) used *Sphaerius* but placed it in the MICROSPORIDAE.
3. Publication of Opinion 1331 has caused considerable confusion in the following respects:
- (i) The generic name *Sphaerius* Waltl, 1838 was suppressed by the Commission solely to remove the homonymy between the derived family name SPHAERIIDAE Erichson, 1845 and SPHAERIIDAE Jeffreys, 1862 (1820) (Mollusca; type genus *Sphaerium* Scopoli, 1777). This unprecedented action was taken despite the fact that *Sphaerius* was stated to have been in general use for many years and that R.V. Melville, then Commission Secretary, emphatically warned (BZN 32: 204) that 'there is no intrinsic reason for suppressing either [the generic or family names] ... there is no justification in this case for the implied disturbance of stability in generic names'. Melville (BZN 32: 60–62) also suggested that the most satisfactory way of removing homonymy was to adopt the spelling SPHAERIUSIDAE, as specified in Article 55b(ii) of the current Code. The suppression of *Sphaerius* for the purposes of homonymy has the undesirable, and presumably overlooked, effect of permitting the future introduction of this name in a quite different taxonomic sense.
  - (ii) The type species of *Sphaerius* is *S. acaroides*, Waltl, 1838, and the type species of *Microsporus* is *M. obsidianus* Kolenati, 1846. These two specific names were synonymised by Mathews (1899), but this synonymy has never been confirmed. Six syntypes of *Sphaerius acaroides* are in good condition in the Naturhistorisches Museum in Vienna, whereas the types of *Microsporus obsidianus* have not been located with certainty.
  - (iii) The suppression of the generic name *Sphaerius* has induced some authors to believe erroneously that the name of its type species, *Sphaerius acaroides*, was no longer available and to use instead the name of its presumed junior synonym, *Microsporus obsidianus*. Such works include Lohse & Lucht (1989), Löbl (1995) and Endrödy-Younga (1997).
  - (iv) The name MICROSPORIDAE was attributed to Reichardt (1976) in Opinion 1331; Lawrence & Newton (1995, p. 805) pointed out that it was actually established by Crotch (1873, p. 78). The author of the type genus *Microsporus* was erroneously given as Waltl (1838) in (4)(1) of Opinion 1331; in fact, it was Kolenati (1846).
4. In order to remedy these serious defects I propose that Opinion 1331 be modified in a number of respects. This will have the effect of restoring availability to

the name *Sphaerius* Waltl, 1838 and the derived family name; these are the oldest names for the taxa. The spelling SPHAERIUSIDAE is in line with Recommendation 29B of the forthcoming new edition of the Code. The names *Microsporus* Kolenati, 1846, MICROSPORIDAE Crotch, 1873 and *obsidianus* Kolenati, 1846 remain available should they be required for future taxonomic use.

5. This proposal to the Commission has the support of a large number of entomologists whose views I have sought, including J.M. Kerzhner (St Petersburg), B. Klausnitzer (Dresden), I. Löbl (Geneva) and A. Smetana (Ottawa).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers:
  - (a) to rescind the suppression under the plenary powers of the generic name *Sphaerius* Waltl, 1838;
  - (b) to rule that for the purposes of Article 29 of the Code the stem of the generic name *Sphaerius* Waltl, 1838 is SPHAERIUS-;
- (2) to delete the entry for *Sphaerius* Waltl, 1838 from the Official Index of Rejected and Invalid Generic Names in Zoology and to place on the Official List of Generic Names in Zoology the name *Sphaerius* Waltl, 1838 (gender: masculine), type species by monotypy *Sphaerius acaroides* Waltl, 1838;
- (3) to place on the Official List of Specific Names in Zoology the name *acaroides* Waltl, 1838, as published in the binomen *Sphaerius acaroides* (specific name of the type species of *Sphaerius* Waltl, 1838);
- (4) to place on the Official List of Family-Group Names in Zoology the name SPHAERIUSIDAE Erichson, 1845, type genus *Sphaerius* Waltl, 1838 (spelling emended by the ruling in (1)(b) above);
- (5) to emend the entry on the Official List of Family-Group Names in Zoology for the name MICROSPORIDAE Reichardt, 1976 to read 'MICROSPORIDAE Crotch, 1873 (type genus *Microsporus* Kolenati, 1846)';
- (6) to emend the entry on the Official Index of Rejected and Invalid Family-Group Names in Zoology for SPHAERIIDAE Erichson, 1845 to read 'SPHAERIIDAE Erichson, 1845 (an incorrect original spelling of SPHAERIUSIDAE)' under the ruling given in (1)(b) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).